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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/961,114	09/20/2001	Donald V. Perino	RB1-035USC3	4507

29150 7590 04/16/2003

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EXAMINER

FIGUEROA, FELIX O

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 04/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/961,114

Applicant(s)

PERINO ET AL.

Examiner

Felix O. Figueroa

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 68,70-75,77,79-83 and 85-90 is/are pending in the application.
- 4a) Of the above claim(s) 89 and 90 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 68,70-75,77,79-83 and 85-88 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

This application contains claims 89-90 drawn to an invention nonelected without traverse in Paper No. 6. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 68, 79, 85 and 86 are rejected under 35 U.S.C. 102(e) as being anticipated by Bellomo et al. (US 5,419,712).

Bellomo discloses a chip package comprising: a packaging material (Fig.5) having a first side and a second side; a lead (34) extending from a first side of the packaging material; and a separate clip portion (40 in Fig.10B) having a left connector portion, a right connector portion and a bridge (Fig.10B); wherein the left connector portion extends along the second side, the right connector portion extends along a third side and the bridge portion extends along a fourth side; and wherein the connectors portion mate with a base to retain the packaging material in contact with the base.

Regarding claim 79, Bellomo discloses the lead being a flexible material (i.e. metal).

Regarding claim 85, Bellomo discloses an integrated circuit (38) disposed in the package material.

Regarding claim 86, Bellomo discloses the first and second clip portion being flexible.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 70-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellomo in view of Cutchaw (US 4,293,175).

Bellomo discloses substantially the claimed invention except for the flexible insert. Cutchaw teaches the use of a flexible insert (110) interposed between the lead (98a) and the first side of the packaging material (92a) to provide a flexible contact with the mating element. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the package of Bellomo with a flexible insert interposed between the leads and the first side of the packaging material, as taught by Cutchaw, to provide a flexible contact with the mating element.

Regarding claim 71, Bellomo, as modified by Cutchaw, discloses substantially the claimed invention except for cylindrical shape. However, it would have been an

obvious choice one having ordinary skill in the art to form the insert having a different shape, e.g. being cylindrical, since applicant has not disclosed that such shape solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with insert of Cutchaw.

Regarding claims 72 and 73, Cutchaw discloses the insert being of a compliant material, specifically an elastomer.

Regarding claims 74-75, Cutchaw discloses the lead having a substantially C-shape; and being compressible.

Claim 77 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bellomo in view of Taniguchi et al. (US 5,451,815).

Bellomo discloses substantially the claimed invention except for the use of support pins. Taniguchi teaches a chip package (10) having support pins (12a-d) extending from the packaging material to provide vertical support the package. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to for the chip package of Bellomo having support pins extending from the packaging material, as taught by Taniguchi, to provide vertical support the package.

Claims 80-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellomo et al.

Regarding claim 80, Bellomo discloses substantially the claimed invention except for the specific material of lead. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use beryllium-cooper as the preferred

material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claims 81-83, Bellomo discloses substantially the claimed invention except for the material of the packaging material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a flexible material, e.g. silicon rubber, as the preferred material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claims 87 and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellomo in view of Sonobe (US 4,636,022).

Bellomo discloses substantially the claimed invention except for the bottom-facing housing and the pocket. Sonobe teaches the use of a package (10) having a bottom-facing housing (see Fig.5) extending laterally from the packaging material and having a pocket, an end of the lead being disposed within the pocket when the lead is compressed, to protect the lead from external tampering. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the package of Bellomo having a bottom-facing housing extending laterally from the packaging material and having a pocket, as taught by Sonobe, to protect the lead from external tampering.

### ***Response to Arguments***

Applicant's arguments with respect to claim 68 have been considered but are moot in view of the new grounds of rejection.

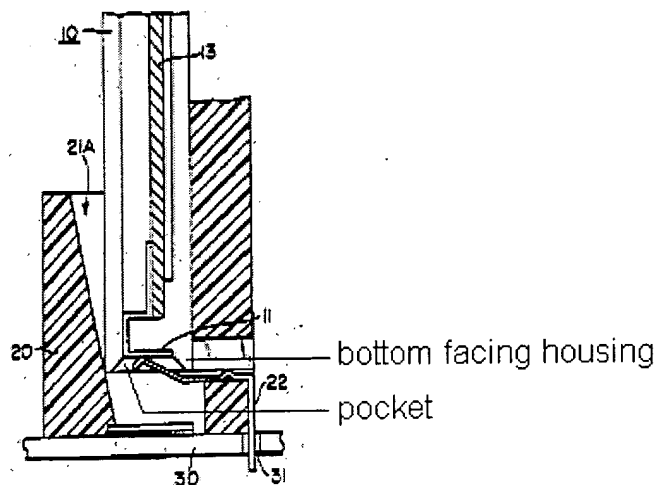
In response to applicant's arguments regarding claim 79, please note that neither the claim nor the office action require a flexible lead, but rather a lead made of "flexible material". Bellomo discloses the leads 34 made of electrically conductive material, thus inherently requiring a flexible metallic material. If is intended to claim a "flexible lead", applicant is required to amend the claims in order to clearly express applicant's intention.

In response to applicant's argument (regarding claims 70-75) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Cutchaw teaches a flexible insert (110) interposed between the lead (98a) and the first side of the packaging material (92a) to provide a flexible uniform contact with the mating element. It is further noted that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references

would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant's arguments regarding claim 77, a recitation of the intended use of the claimed invention (i.e. the support pins) must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

In response to applicant's argument that about Sonobe see figure below.



In response to applicant's argument that "Sonobe has not relationship to a pocket in a chip package as recited by Applicant's claim 87", please note that it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention.

See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Sonobe teaches the use of a package having a bottom-facing housing having a pocket to protect the lead from external tampering.

Additionally, it is noted that claim 88 only requires that in case of compression of the lead, the same be disposed within the pocket. Clearly, Sonobe teaches this recitation.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (703) 308-0097. The examiner can normally be reached on Mon.-Fri., 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

ffr  
April 9, 2003

  
RENEE LUEBKE  
PRIMARY EXAMINER